

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-17 (cancelled)

Claim 18 (currently amended): A carrier structure for a reflector element, for use in a solar energy reflector system, and which comprises:

a reflector element;

a platform which is separate from the reflector element and upon which ~~arranged to carry~~ the reflector element is mounted, and which is formed with stiffening elements;

a frame structure supporting the platform, wherein the frame structure comprises a space frame;

at least one curved transverse frame member; and

a mounting arrangement supporting the frame structure in a manner that accommodates turning of the carrier structure about an axis of rotation that lies substantially coincident with a longitudinal axis of the reflector element when mounted to the platform,

wherein the space frame comprises struts connecting opposite end regions of the at least one curved transverse frame member to a spine member;

wherein the platform is secured to the at least one curved transverse frame member in a manner such that the curvature of the at least one curved transverse frame member ~~is imparted to~~ causes the platform to curve concavely, and

wherein the reflector element is secured to the platform in a manner such that the curvature of the platform ~~is imparted to~~ causes the reflector element to curve concavely.

Claim 19 (previously presented): The carrier structure as claimed in claim 18 wherein the platform comprises a corrugated metal panel, with the corrugations forming the stiffening elements, and wherein the reflector element is supported upon the crests of the corrugations.

Claim 20 (previously presented): The carrier structure as claimed in claim 18 wherein the platform comprises a panel-like platform, wherein the stiffening elements are formed as flutes in the platform and wherein the reflector element is supported upon crests of the flutes.

Claim 21 (previously presented): The carrier structure as claimed in claim 19 wherein the stiffening elements are orientated to extend in a direction parallel to the axis of rotation.

Claim 22 (previously presented): The carrier structure as claimed in claim 18 wherein the platform is curved concavely in a direction orthogonal to the axis of rotation.

Claim 23 (previously presented): The carrier structure as claimed in claim 22 wherein the platform is curved with a radius of curvature within the range of 20 to 50 metres.

Claim 24 (canceled)

Claim 25 (previously presented): The carrier structure as claimed in claim 18 wherein the reflector element comprises a panel-shaped glass mirror.

Claim 26 (previously presented): The carrier structure as claimed in claim 18 wherein the reflector element comprises a plurality of edge-abutting glass mirrors.

Claim 27 (previously presented): The carrier structure as claimed in claim 18 wherein the reflector element is adhered to the platform.

Claim 28 (previously presented): The carrier structure as claimed in claim 18 wherein the frame structure comprises hoop-like end members that extend about the axis of rotation of the carrier structure and wherein the platform extends in the longitudinal direction between the end members.

Claim 29 (previously presented): The carrier structure as claimed in claim 28 wherein the end members are supported for turning upon the mounting arrangement.

Claim 30 (previously presented): The carrier structure as claimed in claim 28 wherein each said hoop-like end member has a channel-section circumferential portion and a diametrically extending member that is constituted by one of the curved transverse frame members.

Claim 31 (previously presented): The carrier structure as claimed in claim 30 wherein the mounting arrangement comprises spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end members.

Claim 32 (previously presented): The carrier structure as claimed in claim 28 and further comprising a drive system for imparting unidirectional turning drive to the carrier structure by way of at least one of the end members.

Claim 33 (currently amended): The carrier structure as claimed in claim ~~[[32]]~~ 31 wherein the drive system comprises:

a) a link chain that extends around and is fixed to the end member to form, ~~in effect,~~ a gear wheel;

- b) an electric motor; and
- c) a sprocket for transferring drive from the motor to the link chain.

Claim 34 (canceled)

Claim 35 (previously presented): The carrier structure as claimed in claim 28, wherein each of the hoop-like end members has a diametrically extending member that is constituted by one of the curved transverse frame members, and wherein the space frame connects opposite end regions of each of the curved transverse frame members to a spine member.

Claim 36 (previously presented): The carrier structure as claimed in claim 35, wherein the spine member interconnects the end members.

Claim 37 (previously presented): The carrier structure as claimed in claim 28, wherein the mounting arrangement further comprises a hold-down roller which prevents the lifting of the end members.

Claim 38 (previously presented): The carrier structure as claimed in claim 28, wherein two or more carrier structures are positioned linearly in a row and are connected to one to another by way of adjacent ones of the hoop-like end members.

Claim 39 (previously presented): The carrier structure as claimed in claim 38 and further comprising a drive system for imparting unidirectional turning drive to the row of two of more carrier structures by way of at least one of the end members.

Claim 40 (currently amended): A carrier structure for a reflector element, for use in a solar energy reflector system, and which comprises:

a platform which is separate from and is arranged to carry the reflector element and which is formed with stiffening elements,

a frame structure supporting the platform, wherein the frame structure comprises a space frame, and wherein the frame structure comprises hoop-like end members that extend about the axis of rotation of the carrier structure and wherein the platform extends in the longitudinal direction between the end members, wherein each of the hoop-like end members has a channel-section circumferential portion, wherein the carrier structure comprises at least one curved transverse frame member, wherein the space frame comprises struts connecting opposite end regions of the at least one curved transverse frame member to a spine member, wherein the platform is secured to the at least one curved transverse frame member in a manner such that the curvature of the at least one curved transverse frame member causes the platform to curve

concavely, and wherein the reflector element is secured to the platform in a manner such that the curvature of the platform causes the reflector element to curve concavely; and

a mounting arrangement supporting the frame structure in a manner that accommodates turning of the carrier structure about an axis of rotation that lies substantially coincident with a longitudinal axis of the reflector element when mounted to the platform, wherein the end members are supported for turning upon the mounting arrangement, and wherein the mounting arrangement comprises spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end members.